

# EMC TEST REPORT

Test item : LED TV Monitor  
Model No. : 42LN5750-UH  
Order No. : DEMC1302-00473  
Date of receipt : 2013-02-04  
Test duration : 2013-02-14  
Use of report : FCC CoC Marking  
Date of Issue : 2013-02-18

Applicant : LG Electronics Inc.

19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea

Test laboratory : Digital EMC Co., Ltd.

683-3, Yubang-Dong, Cheoin-Gu, Yongin-Si, Gyeonggi-Do, 449-080, Korea

Test specification : ANSI C 63.4:2003  
FCC Part 15 Subpart B  
(Type of Device : Class B Personal Computers  
and Peripherals (JBP))

Test environment : Temperature : (20 ~ 22) °C,  
Humidity : (37 ~ 39) % R.H.

Test result :  Comply  Not Comply

The test results presented in this test report are limited only to the sample supplied by applicant and the use of this test report is inhibited other than its purpose.


This test report shall not be reproduced except in full, without the written approval of DIGITAL EMC CO., LTD.

Tested by:

Reviewed by:



Engineer  
SeHyun Kim



General Manager  
ChangHo Lee

**PRESIDENT OF DIGITAL EMC CO., LTD.**

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## 1. General Remarks

This report contains the result of tests performed by:

**DIGITAL EMC CO., LTD.**

Address : 683-3, Yubang-Dong, Cheoin-Gu, Yongin-Si, Gyeonggi-Do, 449-080, Korea

<http://www.digitalemc.com>

Tel: +82-31-321-2664 Fax: +82-31-321-1664

## 2. Test Laboratory

Digital EMC Co., Ltd. has been accredited / filed / authorized by the agencies listed in the following table;

Certificate	Nation	Agency	Code	Mark
Accreditation	Korea	KOLAS	393	ISO/IEC 17025
Site Filing	USA	FCC	101842 678747	Test Facility list & NSA Data
	Canada	IC	5740A-1 5740A-2	Test Facility list & NSA Data
	Japan	VCCI	C-1427 R-1364, R-3385 T-1442, G-338	Test Facility list & NSA Data
Certification	Korea	KC	KR0034	Test Facility list & NSA Data
	Germany	TUV	ROK1221C	ISO/IEC 17025

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the "General requirements for the competent of calibration and testing laboratory".

### 3. General Information of EUT

Model No.	42LN5750-UH
EUT Type	LED TV Monitor
Serial No	NONE
FCC ID	BEJ42LN5750UH
Type of Sample Tested	Pre-Production
High Frequency	790 MHz
Rating	AC 100-240 V~ 50/60 Hz, 1.1 A
Supplied Power for Test	AC 120 V, 60 Hz
Applicant	LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea
Manufacturer	LG Electronics Inc. 19-1, Cheongho-ri, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, 451-713, Korea

#### HDMI (PC) supported mode

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
640 x 350	31.468	70.09
720 x 400	31.469	70.08
640 x 480	31.469	59.94
800 x 600	37.879	60.31
1024 x 768	48.363	60.00
1152 x 864	54.348	60.053
1360 x 768	47.712	60.015
1280 x 1024	63.981	60.020
1920 x 1080	67.5	60.00

## 4. Test Summary

### 4.1 Applied standards and test results

Test Items	Applied Standards	Results
Conducted Disturbance	ANSI C63.4:2003	C
Radiated Disturbance	ANSI C63.4:2003	C
C=Comply N/C=Not Comply N/T=Not Tested N/A=Not Applicable		

The data in this test report are traceable to the national or international standards.

### 4.2 Test environment and conditions

Test Items	Test date (MM-DD)	Temp (°C)	Humidity (% R.H.)
Conducted Disturbance	02-14	20	37
Radiated Disturbance	02-14	22	39

### 4.3 Test result Summary

#### (1) Conducted Emission (HDMI MODE)

Frequency [MHz]	Phase	Result [dB $\mu$ V]	Detector	Limit [dB $\mu$ V]	Margin [dB]
0.15006	L1	59.8	Quasi-Peak	66.0	6.2

#### (2) Radiated Emission (HDMI MODE)

Frequency [MHz]	Pol.	Result [dB( $\mu$ V/m)]	Detector	Limit [dB( $\mu$ V/m)]	Margin [dB]
587.560	H	41.9	Quasi-Peak	46.0	4.1

## 5. Test Set-up and operation mode

### 5.1 Principle of Configuration Selection

**Emission** : The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

### 5.2 Test Operation Mode

- HDMI MODE : 1920x1080 Resolution (Worst case)
- USB MODE : USB record file play

### 5.3 Support Equipment Used

Unit	Model No.	Serial No.	Manufacturer	CABLE				Backshell	FCC ID
				Connect type	Length (m)	ferrite core	shield		
PC	VOSTRO430	9K77SBX	DELL	POWER	1.8	Not use	Non-shield	Plastic	DOC
				HDMI	1.8	Not use	Shield		
				USB	1.8	Not use	Shield		
				USB	1.8	Not use	Shield		
				USB	1.8	Not use	Shield		
KEYBOARD	SKG-3000UB	TAKB60123 5V	MONITREY INTERNATIONAL CORP	USB	1.8	Not use	Shield	Plastic	DOC
MOUSE	1484	3527000213 72	MICROSOFT CORPORATION	USB	1.8	Not use	Shield	Plastic	DOC
CD/DVD PLAYER	DVP-NS92V	2000407	SONY EMCS	POWER AV	1.8 1.6	Not use Not use	Non-shield Non-shield	Plastic	VER
USB MEMORY	Cruzer Z37	N/A	Sandisk	USB	-	-	-	-	DOC
PRINTER	SRP-770	SRP770080 60035	BICSOLON	POWER USB	1.8 1.8	Not use Not use	Non-shield	Plastic	DOC
Headset	COV903	N/A	COSY	STEREO	1.5	Not use	Non-shield	Plastic	DOC
Remote Control	AN-MR400K	N/A	OHSUNG ELECTRONIC	-	-	-	-	-	-

## 6. Test Results : Emission

### 6.1 Conducted Disturbance

#### 6.1.1 Measurement Procedure

In the range of 0.15 MHz to 30 MHz, the conducted disturbance was measured and set-up was made accordance with **ANSI C63.4**.

If the EUT is table top equipment, it was placed on a wooden table with a height of 0.8 m above the reference ground plane and 0.4 m from the conducting wall of the shielded room.

Also if the EUT is floor-standing equipment, it was placed on a non-conducted support with a height up to 0.15 m above the reference ground plane.

Connect the EUT's power source lines to the appropriate power mains / peripherals through the LISN. All the other peripherals are connected to the 2<sup>nd</sup> LISN, if any.

Unused measuring port of the LISN was resistively terminated by 50 ohm terminator.

The measuring port of the LISN for EUT was connected to spectrum analyzer.

Using conducted emission test software, the emissions were scanned with peak detector mode.

After scanning over the frequency range, suspected emissions were selected to perform final measurement. When performing final measurement, the receiver was used which has Quasi-Peak detector and Average detector.

By varying the configuration of the test sample and the cable routing it was attempted to maximize the emission.

For further description of the configuration refer to the picture of the test set-up.

#### 6.1.2 Limit for Conducted Disturbance

(1) Conducted disturbance at mains ports.

Frequency range (MHz)	Limits dB(μV)			
	Quasi-peak		Average	
	Class A	Class B	Class A	Class B
0.15 to 0.50	79	66 to 56	66	56 to 46
0.50 to 5	73	56	60	46
5 to 30		60		50

Note 1 The lower limit shall apply at the transition frequencies.  
 Note 2 The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

- Note) 1. Emission Level = Reading Value + Correction Factor.  
 2. Correction Factor = Cable Loss + Insertion Loss of LISN  
 3. Margin = Limit - Emission level

Test Result

< HDMI MODE >



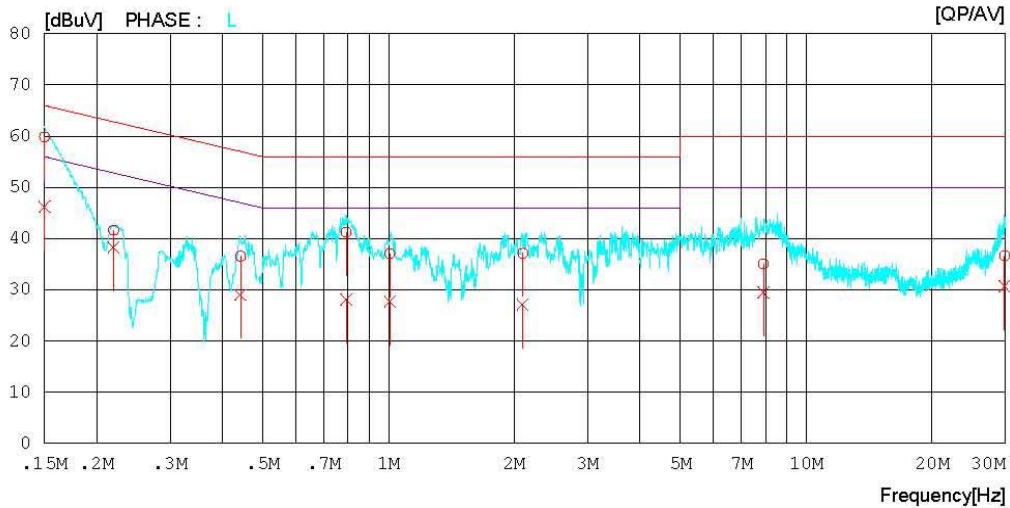
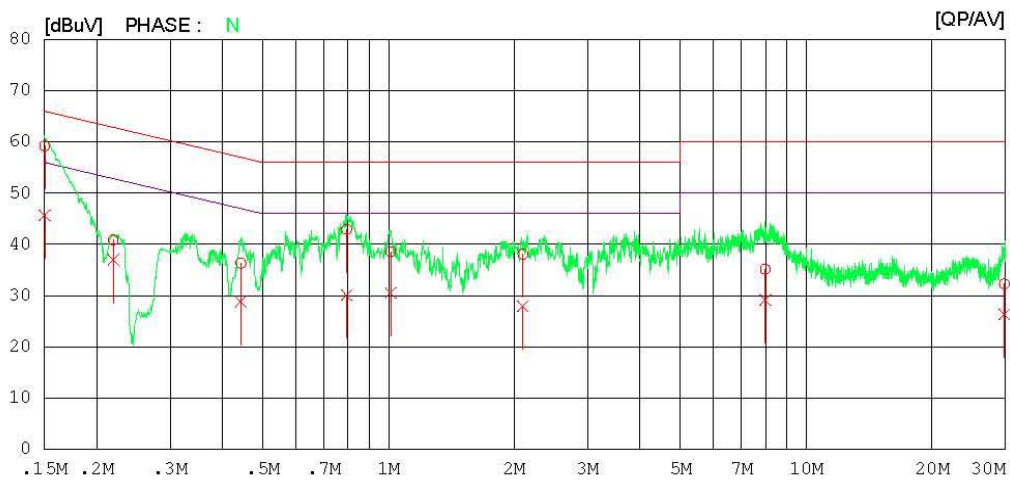
Results of Conducted Emission

Digital EMC  
Date : 2013-02-14

Model No. : 42LN5750-UH  
Type :  
Serial No. :  
Test Condition : HDMI

Reference No. :  
Power Supply : 120 V 60 Hz  
Temp/Humi. : 20°C 37 % R.H  
Operator :

Memo :  
LIMIT : CISPR22\_B QP  
CISPR22\_B AV



## Results of Conducted Emission

Digital EMC  
 Date : 2013-02-14

Model No.	: 42LN5750-UH	Reference No.	:
Type	:	Power Supply	: 120 V 60 Hz
Serial No.	:	Temp/Humi.	: 20 °C 37 % R.H
Test Condition	: HDMI	Operator	:

Memo :

LIMIT : CISPR22\_B QP  
 CISPR22\_B AV

NO	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.15031	59.0	45.5	0.2	59.2	45.7	66.0	56.0	6.8	10.3	N
2	0.21948	40.6	36.8	0.2	40.8	37.0	62.8	52.8	22.0	15.8	N
3	0.44320	36.1	28.7	0.2	36.3	28.9	57.0	47.0	20.7	18.1	N
4	0.79408	42.7	29.9	0.2	42.9	30.1	56.0	46.0	13.1	15.9	N
5	1.01300	38.3	30.2	0.3	38.6	30.5	56.0	46.0	17.4	15.5	N
6	2.09750	37.8	27.6	0.3	38.1	27.9	56.0	46.0	17.9	18.1	N
7	7.97900	34.6	28.6	0.5	35.1	29.1	60.0	50.0	24.9	20.9	N
8	29.80400	31.3	25.4	1.0	32.3	26.4	60.0	50.0	27.7	23.6	N
9	0.15006	59.6	46.0	0.2	59.8	46.2	66.0	56.0	6.2	9.8	L
10	0.21976	41.4	38.0	0.2	41.6	38.2	62.8	52.8	21.2	14.6	L
11	0.44256	36.3	28.8	0.2	36.5	29.0	57.0	47.0	20.5	18.0	L
12	0.79256	41.0	27.9	0.2	41.2	28.1	56.0	46.0	14.8	17.9	L
13	1.00750	36.8	27.4	0.3	37.1	27.7	56.0	46.0	18.9	18.3	L
14	2.09750	36.8	26.8	0.3	37.1	27.1	56.0	46.0	18.9	18.9	L
15	7.90300	34.5	29.0	0.5	35.0	29.5	60.0	50.0	25.0	20.5	L
16	29.85050	35.7	29.7	1.0	36.7	30.7	60.0	50.0	23.3	19.3	L

< USB MODE >



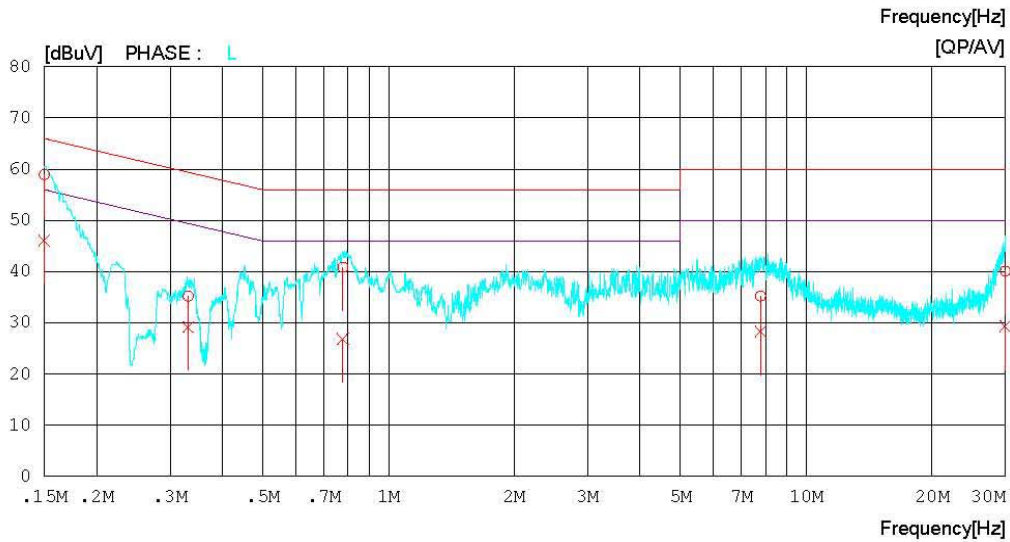
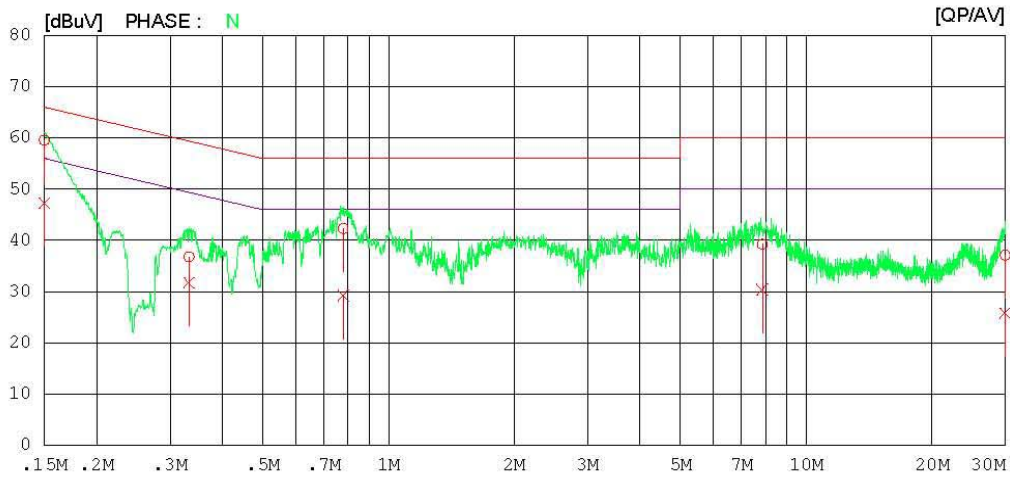
Results of Conducted Emission

Digital EMC  
Date : 2013-02-14

Model No. : 42LN5750-UH  
Type :  
Serial No. :  
Test Condition : USB

Reference No. :  
Power Supply : 120 V 60 Hz  
Temp/Humi. : 20°C 37 % R.H  
Operator :

Memo :  
LIMIT : CISPR22\_B QP  
CISPR22\_B AV



## Results of Conducted Emission

Digital EMC  
 Date : 2013-02-14

Model No. : 42LN5750-UH  
 Type :  
 Serial No. :  
 Test Condition : USB

Reference No. :  
 Power Supply : 120 V 60 Hz  
 Temp/Humi. : 20 °C 37 % R.H  
 Operator :

Memo :

LIMIT : CISPR22\_B QP  
 CISPR22\_B AV

NO	FREQ [MHz]	READING		C. FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.15000	59.3	47.0	0.2	59.5	47.2	66.0	56.0	6.5	8.8	N
2	0.33308	36.6	31.5	0.2	36.8	31.7	59.4	49.4	22.6	17.7	N
3	0.77936	42.1	29.1	0.2	42.3	29.3	56.0	46.0	13.7	16.7	N
4	7.85150	38.7	29.9	0.5	39.2	30.4	60.0	50.0	20.8	19.6	N
5	29.95000	36.1	24.8	1.0	37.1	25.8	60.0	50.0	22.9	24.2	N
6	0.15000	58.7	45.9	0.2	58.9	46.1	66.0	56.0	7.1	9.9	L
7	0.33150	35.0	29.0	0.2	35.2	29.2	59.4	49.4	24.2	20.2	L
8	0.77798	40.6	26.7	0.2	40.8	26.9	56.0	46.0	15.2	19.1	L
9	7.78050	34.7	27.8	0.5	35.2	28.3	60.0	50.0	24.8	21.7	L
10	29.97350	39.1	28.3	1.0	40.1	29.3	60.0	50.0	19.9	20.7	L

## 6.2 Radiated Disturbance

### 6.2.1 Measurement Procedure

The radiated disturbance was measured and set-up was made accordance with **ANSI C63.4**.

If the EUT is tabletop equipment, it was placed on a wooden table with a height of 0.8 m above the reference ground plane and 3 m or 10 m away from the interference receiving antenna in the **10m semi-anechoic chamber**.

Also if the EUT is floor-standing equipment, it was placed on a non-conducted support with a height up to 0.15 m above the reference ground plane.

Rotate the EUT from (0 - 360)° and position the receiving antenna at heights from (1 - 4) m above the reference ground plane continuously to determine associated with higher emission levels and record them.

The measurement was made in both the vertical and horizontal polarization, and the maximum value is presented in the report.

For below 1 GHz frequency range, Quasi-Peak detector with 120 kHz RBW was used.

Also Peak and Average detector with 1 MHz RBW were used for above 1 GHz frequency range.

For further description of the configuration refer to the picture of the test set-up.

## 6.2.2 Limit for Radiated Disturbance

- The test frequency range of Radiated Disturbance measurements are listed below.

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 108	1 000
108 – 500	2 000
500 – 1 000	5 000
Above 1 000	5 <sup>th</sup> harmonic of the highest frequency or 40 GHz, whichever is lower

### (1) Limit for Radiated Emission below 1 000MHz

Frequency range (MHz)	Class A Equipment (10 m distance)	Class B Equipment (3 m distance)
	Quasi-peak (dB $\mu$ V/m)	Quasi-peak (dB $\mu$ V/m)
30 to 88	39.1	40
88 to 216	43.5	43.5
216 to 960	46.4	46
960 to 1 000	49.5	54

Note 1 The lower limit shall apply at the transition frequency.

Note 2 Additional provisions may be required for cases where interference occurs.

Note 3 According to 15.109(g), as an alternative to the radiated emission limit shown above, digital devices may be shown to comply with the standards(CISPR), Pub. 22 shown as below.

Frequency range (MHz)	Class A Equipment (10 m distance)	Class B Equipment (10 m distance)
	Quasi-peak (dB $\mu$ V/m)	Quasi-peak (dB $\mu$ V/m)
30 to 230	40	30
230 to 1 000	47	37

### (2) Limits for Radiated Emission above 1 000MHz at a measuring distance of 3 m

Frequency (GHz)	Class A Equipment		Class B Equipment	
	Peak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)	Peak (dB $\mu$ V/m)	Average (dB $\mu$ V/m)
1 to 40	80	60	74	54

Note) 1. Emission Level = Reading Value + Correction Factor.

2. Correction Factor = Cable loss - Amp gain + Antenna Factor

3. Margin = Limit - Emission level

Test Result

< HDMI MODE\_30 MHz ~ 1 GHz >

RADIATED EMISSION

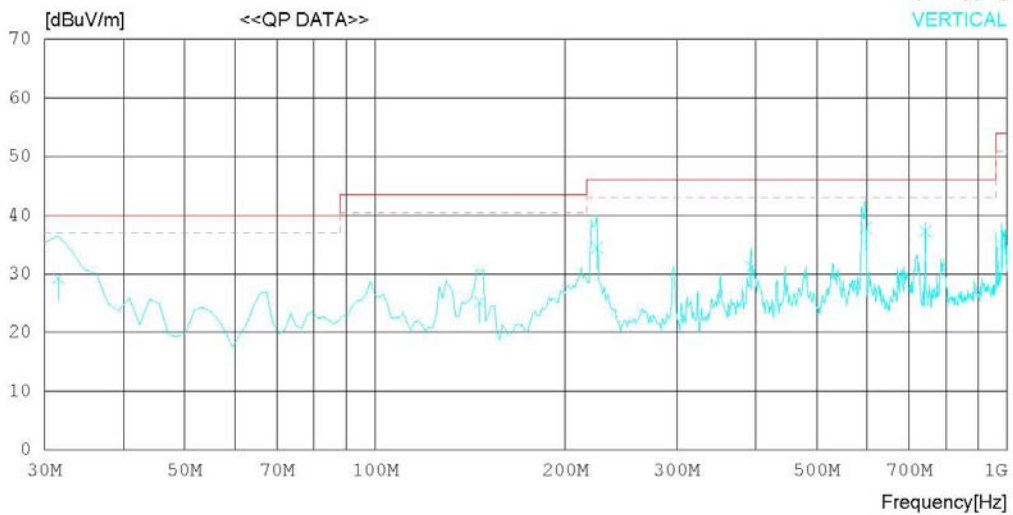
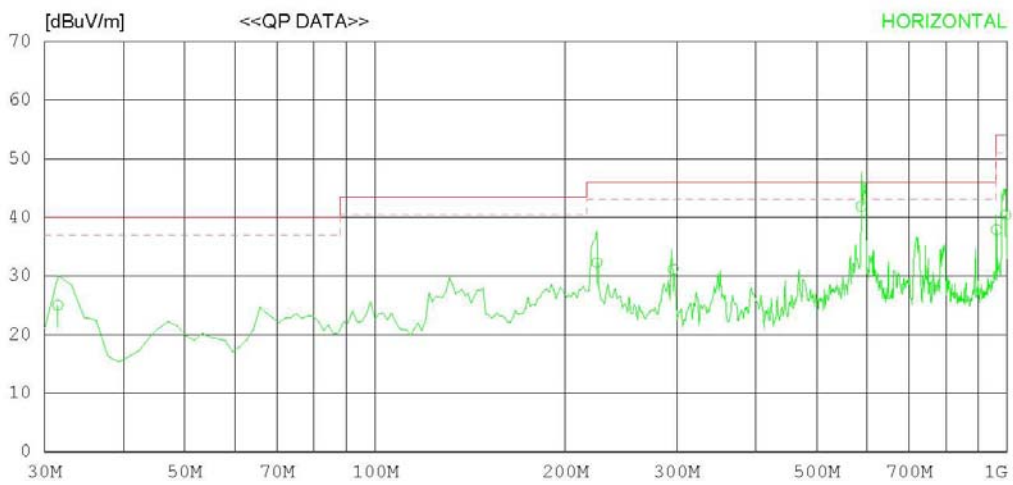
Date : 2013-02-14

Model Name : 42LN5750-UH  
Model No. :  
Serial No. :  
Test Condition : HDMI

Reference No. :  
Power Supply : 120 V 60 Hz  
Temp/Humi : 22 °C 39 % R.H.  
Operator :

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m)  
MARGIN: 3 dB



## RADIATED EMISSION

Date : 2013-02-14

Model Name : 42LN5750-UH	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 22 °C 39 % R.H.
Test Condition : HDMI	Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m)  
 MARGIN: 3 dB

No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	31.502	30.8	17.1	0.9	23.8	25.0	40.0	15.0	400	138
2	224.374	42.6	11.2	2.4	23.9	32.3	46.0	13.7	100	160
3	296.071	38.2	13.7	2.8	23.6	31.1	46.0	14.9	301	157
4	587.560	42.7	18.5	4.1	23.4	41.9	46.0	4.1	100	149
5	962.082	33.7	21.7	5.4	22.9	37.9	54.0	16.1	100	145
6	993.917	35.4	22.2	5.5	22.7	40.4	54.0	13.6	400	153
----- Vertical -----										
7	31.541	35.1	17.1	0.9	23.8	29.3	40.0	10.7	100	138
8	146.394	37.2	10.6	1.7	24.2	25.3	43.5	18.2	400	147
9	224.487	44.8	11.2	2.4	23.9	34.5	46.0	11.5	100	139
10	394.508	35.2	15.9	3.5	23.5	31.1	46.0	14.9	199	152
11	597.482	38.4	18.7	4.1	23.4	37.8	46.0	8.2	100	139
12	743.594	37.2	19.2	4.6	23.7	37.3	46.0	8.7	240	141
13	983.237	30.3	22.0	5.4	22.8	34.9	54.0	19.1	100	160

< HDMI MODE \_ (1 ~ 6) GHz \_ Peak >

**RADIATED EMISSION**

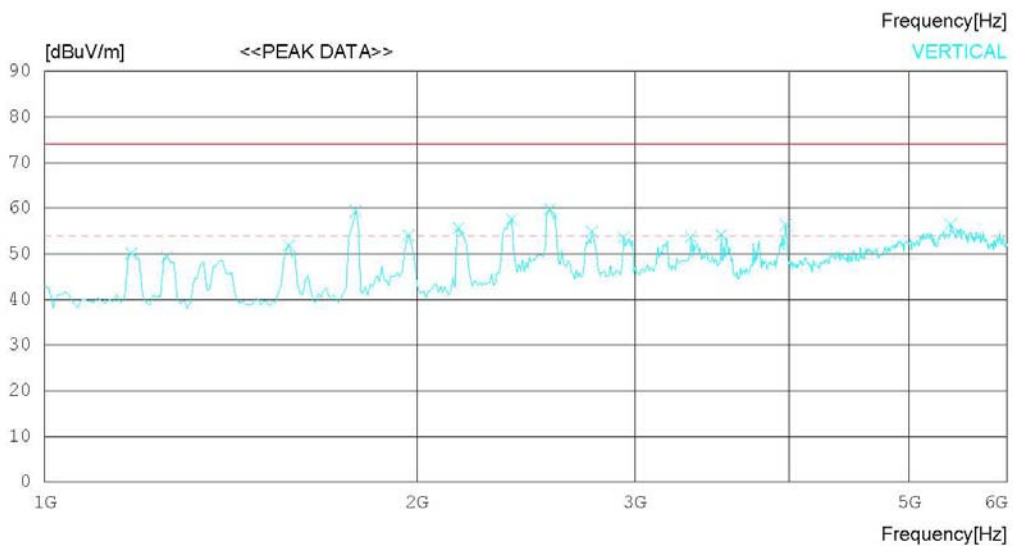
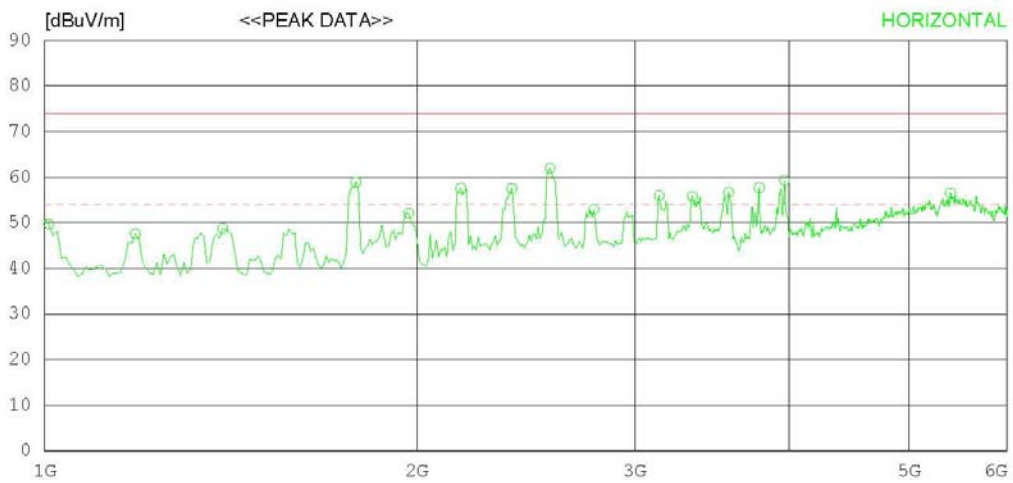
Date : 2013-02-14

Model Name : 42LN5750-UH  
Model No. :  
Serial No. :  
Test Condition : HDMI

Reference No. :  
Power Supply : 120 V 60 Hz  
Temp/Humi : 22 °C 39 % R.H.  
Operator :

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)  
FCC Part15 Subpart.B Class B (3m) - 18G(Avg)



## RADIATED EMISSION

Date : 2013-02-14

Model Name : 42LN5750-UH	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 22 °C 39 % R.H.
Test Condition : HDMI	Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m) - 18G(Peak)  
 FCC Part15 Subpart B Class B (3m) - 18G(Avg)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1008.013	48.5	23.9	5.8	28.5	49.7	74.0	24.3	100	187
2	1184.295	45.5	24.2	6.4	28.5	47.6	74.0	26.4	100	139
3	1392.628	45.7	24.5	7.1	28.5	48.8	74.0	25.2	100	227
4	1785.256	54.8	24.6	8.0	28.5	58.9	74.0	15.1	100	141
5	1969.551	47.6	24.6	8.4	28.5	52.1	74.0	21.9	100	358
6	2169.873	51.8	25.5	8.8	28.5	57.6	74.0	16.4	100	213
7	2386.223	49.9	26.8	9.3	28.5	57.5	74.0	16.5	100	358
8	2562.507	53.1	27.6	9.7	28.4	62.0	74.0	12	100	197
9	2778.857	42.9	28.3	10.1	28.4	52.9	74.0	21.1	100	358
10	3139.439	44.6	29.0	10.8	28.4	56.0	74.0	18	100	358
11	3339.762	44.0	28.9	11.3	28.4	55.8	74.0	18.2	100	358
12	3572.138	44.0	29.1	11.9	28.3	56.7	74.0	17.3	100	239
13	3780.474	44.0	29.6	12.4	28.3	57.7	74.0	16.3	100	358
14	3964.772	44.6	30.1	12.9	28.3	59.3	74.0	14.7	100	358
15	5399.048	35.0	34.6	15.0	28.1	56.5	74.0	17.5	100	216
----- Vertical -----										
16	1176.282	48.1	24.1	6.4	28.5	50.1	74.0	23.9	100	174
17	1256.410	46.9	24.3	6.6	28.5	49.3	74.0	24.7	100	1
18	1576.923	48.2	24.6	7.6	28.5	51.9	74.0	22.1	100	1
19	1785.256	55.3	24.6	8.0	28.5	59.4	74.0	14.6	100	219
20	1969.551	49.5	24.6	8.4	28.5	54.0	74.0	20	100	197
21	2161.860	49.9	25.5	8.8	28.5	55.7	74.0	18.3	100	212
22	2386.223	50.0	26.8	9.3	28.5	57.6	74.0	16.4	100	1
23	2562.507	50.9	27.6	9.7	28.4	59.8	74.0	14.2	100	1
24	2770.844	44.8	28.3	10.1	28.4	54.8	74.0	19.2	100	187
25	2939.115	42.8	28.8	10.4	28.4	53.6	74.0	20.4	100	202
26	3331.750	41.9	28.9	11.3	28.4	53.7	74.0	20.3	100	152
27	3524.060	41.8	28.9	11.8	28.3	54.2	74.0	19.8	100	1
28	3972.785	41.7	30.1	12.9	28.3	56.4	74.0	17.6	100	1
29	5399.048	35.0	34.6	15.0	28.1	56.5	74.0	17.5	100	1

< HDMI MODE \_ (1 ~ 6) GHz \_ Average >

**RADIATED EMISSION**

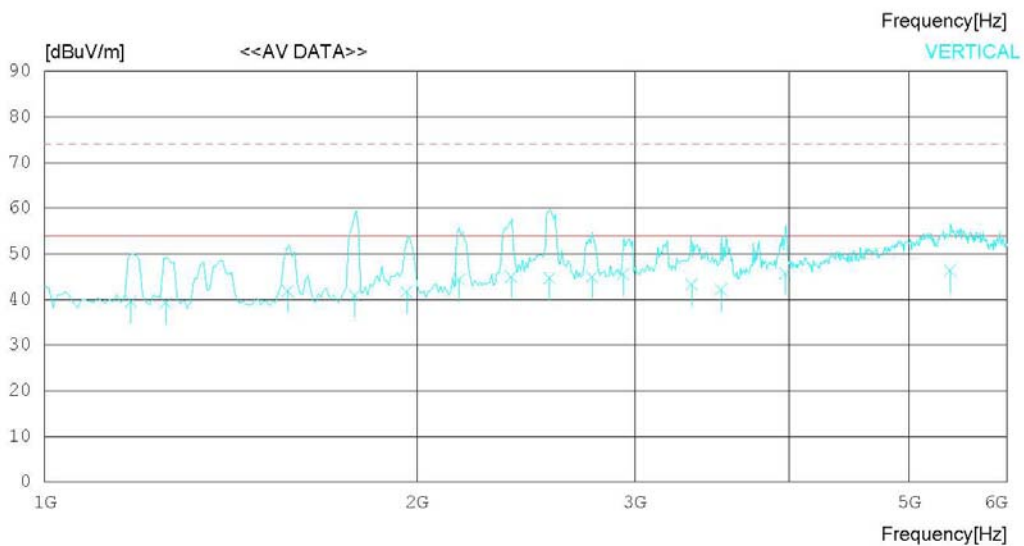
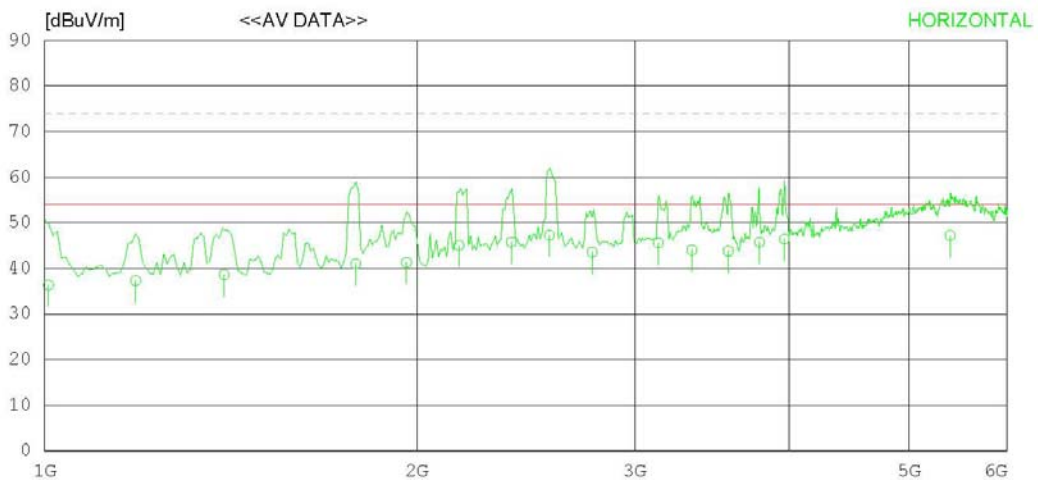
Date : 2013-02-14

Model Name : 42LN5750-UH  
Model No. :  
Serial No. :  
Test Condition : HDMI

Reference No. :  
Power Supply : 120 V 60 Hz  
Temp/Humi : 22 °C 39 % R.H.  
Operator :

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)  
FCC Part15 Subpart.B Class B (3m) - 18G(Peak)



## RADIATED EMISSION

Date : 2013-02-14

Model Name : 42LN5750-UH	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 22 °C 39 % R.H.
Test Condition : HDMI	Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m) - 18G(Avg)  
 FCC Part15 Subpart B Class B (3m) - 18G(Peak)

No.	FREQ [MHz]	READING AV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1007.552	35.1	23.9	5.8	28.5	36.3	54.0	17.7	100	164
2	1185.148	35.2	24.2	6.4	28.5	37.3	54.0	16.7	100	147
3	1396.754	35.5	24.5	7.1	28.5	38.6	54.0	15.4	100	151
4	1784.157	36.9	24.6	8.0	28.5	41.0	54.0	13.0	100	138
5	1961.488	36.8	24.6	8.4	28.5	41.3	54.0	12.7	100	147
6	2162.519	39.2	25.5	8.8	28.5	45.0	54.0	9.0	100	158
7	2384.133	38.1	26.8	9.3	28.5	45.7	54.0	8.3	100	144
8	2560.396	38.4	27.6	9.7	28.4	47.3	54.0	6.7	100	139
9	2771.345	33.6	28.3	10.1	28.4	43.6	54.0	10.4	100	150
10	3134.852	34.2	29.0	10.8	28.4	45.6	54.0	8.4	100	152
11	3336.441	32.2	28.9	11.3	28.4	44.0	54.0	10.0	100	143
12	3570.123	31.1	29.1	11.9	28.3	43.8	54.0	10.2	100	158
13	3784.117	32.0	29.6	12.4	28.3	45.7	54.0	8.3	100	162
14	3963.144	31.8	30.1	12.8	28.3	46.4	54.0	7.6	100	144
15	5394.802	25.8	34.5	15.0	28.1	47.2	54.0	6.8	100	158
----- Vertical -----										
16	1174.120	37.6	24.1	6.4	28.5	39.6	54.0	14.4	100	163
17	1253.336	36.9	24.3	6.6	28.5	39.3	54.0	14.7	100	157
18	1572.057	38.2	24.6	7.6	28.5	41.9	54.0	12.1	100	144
19	1782.456	36.8	24.6	8.0	28.5	40.9	54.0	13.1	100	139
20	1961.749	37.1	24.6	8.4	28.5	41.6	54.0	12.4	100	150
21	2163.956	38.6	25.5	8.8	28.5	44.4	54.0	9.6	100	139
22	2383.518	37.4	26.8	9.3	28.5	45.0	54.0	9.0	100	152
23	2560.399	35.8	27.6	9.7	28.4	44.7	54.0	9.3	100	144
24	2771.474	35.0	28.3	10.1	28.4	45.0	54.0	9.0	100	139
25	2935.468	34.8	28.8	10.4	28.4	45.6	54.0	8.4	100	158
26	3333.987	31.5	28.9	11.3	28.4	43.3	54.0	10.7	100	161
27	3522.227	29.8	28.9	11.8	28.3	42.2	54.0	11.8	100	163
28	3970.847	31.1	30.1	12.9	28.3	45.8	54.0	8.2	100	147
29	5394.110	24.9	34.5	15.0	28.1	46.3	54.0	7.7	100	139

< USB MODE\_30 MHz ~ 1 GHz >

**RADIATED EMISSION**

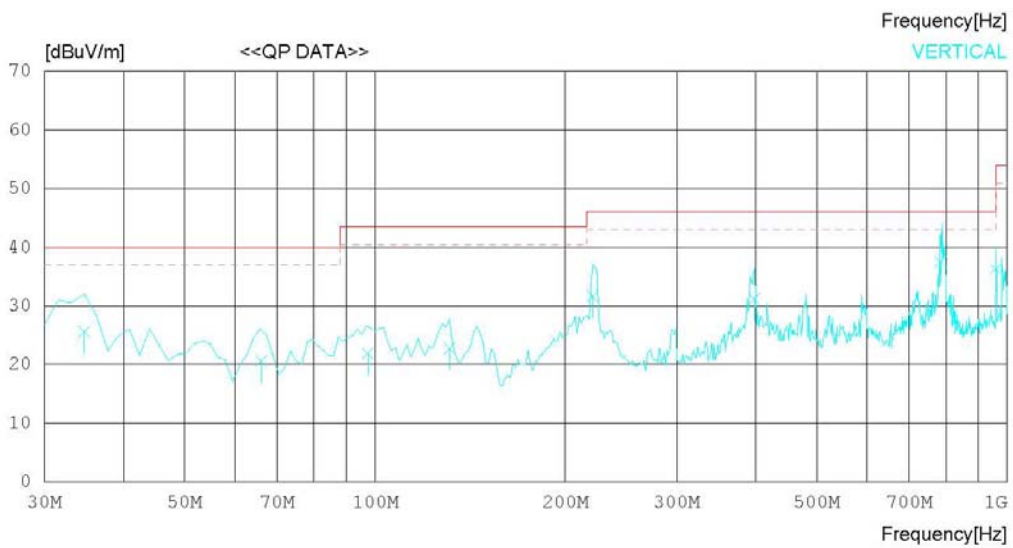
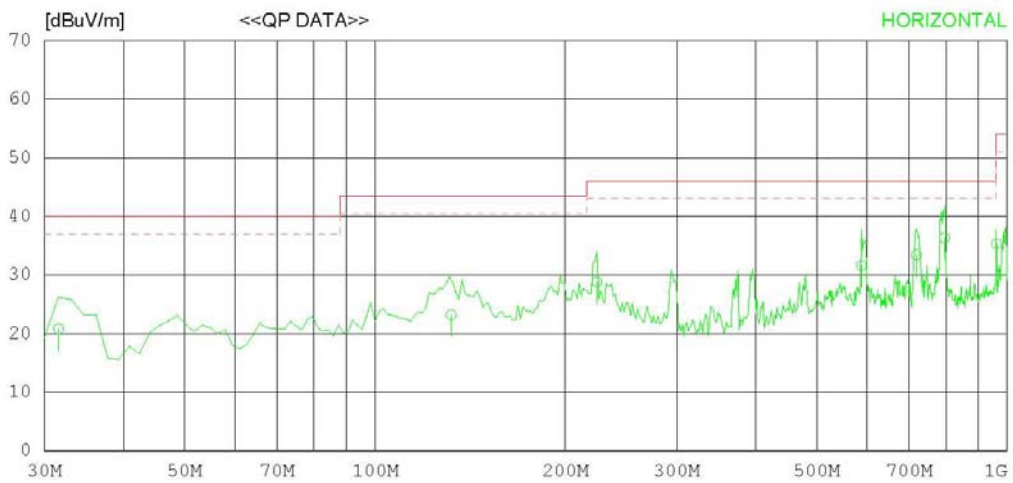
Date : 2013-02-14

Model Name : 42LN5750-UH  
Model No. :  
Serial No. :  
Test Condition : USB

Reference No. :  
Power Supply : 120 V 60 Hz  
Temp/Humi : 22 °C 39 % R.H.  
Operator :

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m)  
MARGIN: 3 dB



## RADIATED EMISSION

Date : 2013-02-14

Model Name : 42LN5750-UH	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 22 °C 39 % R.H.
Test Condition : USB	Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m)  
 MARGIN: 3 dB

No.	FREQ [MHz]	READING QP [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	31.558	26.6	17.1	0.9	23.8	20.8	40.0	19.2	100	141
2	131.871	34.5	11.4	1.5	24.2	23.2	43.5	20.3	400	164
3	224.471	39.1	11.2	2.4	23.9	28.8	46.0	17.2	100	138
4	588.060	32.4	18.5	4.1	23.4	31.6	46.0	14.4	299	155
5	718.677	33.8	18.8	4.6	23.8	33.4	46.0	12.6	100	162
6	796.140	35.1	19.9	4.8	23.5	36.3	46.0	9.7	220	158
7	962.184	31.1	21.7	5.4	22.9	35.3	54.0	18.7	100	147
----- Vertical -----										
8	34.669	33.0	15.4	1.1	23.9	25.6	40.0	14.4	100	148
9	66.047	37.4	6.0	1.6	24.4	20.6	40.0	19.4	100	144
10	97.408	34.4	10.2	1.4	24.1	21.9	43.5	21.6	140	139
11	131.184	34.0	11.5	1.5	24.2	22.8	43.5	20.7	400	161
12	221.090	42.2	11.0	2.4	23.9	31.7	46.0	14.3	299	152
13	398.311	35.2	16.0	3.5	23.5	31.2	46.0	14.8	100	133
14	783.868	36.5	19.8	4.8	23.5	37.6	46.0	8.4	100	160
15	958.584	32.2	21.6	5.4	22.9	36.3	46.0	9.7	400	154

< USB MODE \_ (1 ~ 6) GHz \_ Peak >

**RADIATED EMISSION**

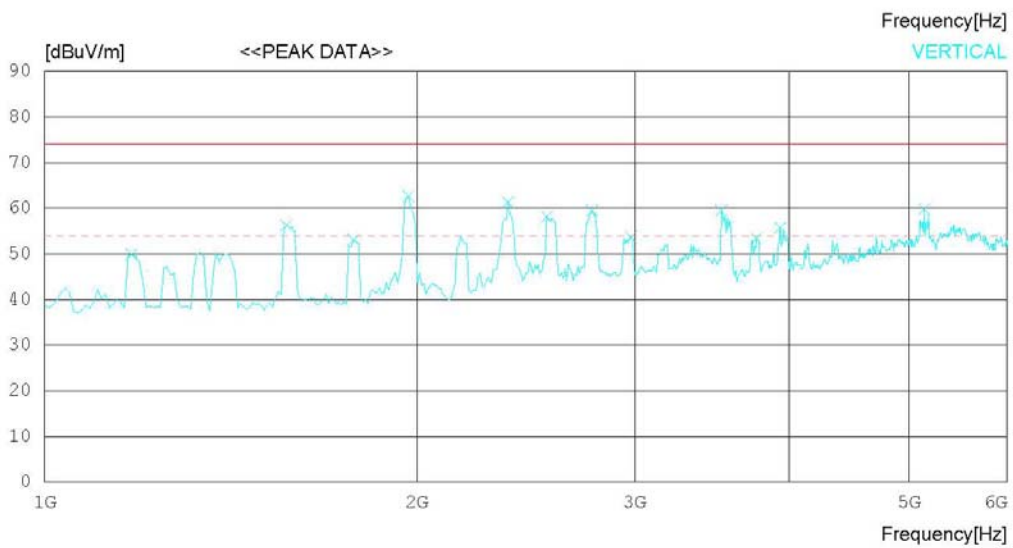
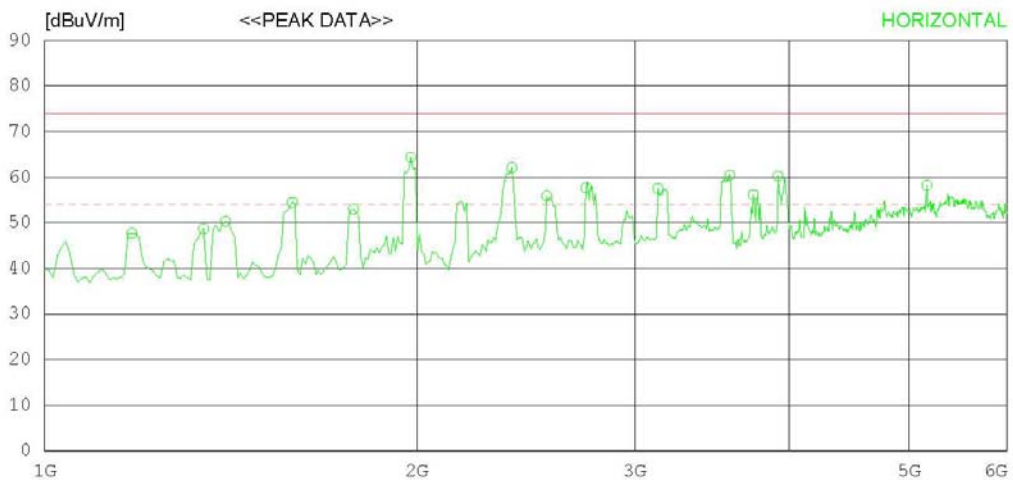
Date : 2013-02-14

Model Name : 42LN5750-UH  
Model No. :  
Serial No. :  
Test Condition : USB

Reference No. :  
Power Supply : 120 V 60 Hz  
Temp/Humi : 22 °C 39 % R.H.  
Operator :

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Peak)  
FCC Part15 Subpart.B Class B (3m) - 18G(Avg)



## RADIATED EMISSION

Date : 2013-02-14

Model Name : 42LN5750-UH	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 22 °C 39 % R.H.
Test Condition : USB	Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m) - 18G(Peak)  
 FCC Part15 Subpart B Class B (3m) - 18G(Avg)

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1176.282	45.7	24.1	6.4	28.5	47.7	74.0	26.3	100	246
2	1344.551	45.8	24.4	7.0	28.5	48.7	74.0	25.3	100	358
3	1400.641	47.1	24.5	7.2	28.5	50.3	74.0	23.7	100	238
4	1584.936	50.7	24.6	7.7	28.5	54.5	74.0	19.5	100	238
5	1777.243	48.9	24.6	8.0	28.5	53.0	74.0	21	100	174
6	1977.564	59.9	24.6	8.4	28.5	64.4	74.0	9.6	100	215
7	2386.223	54.5	26.8	9.3	28.5	62.1	74.0	11.9	100	199
8	2546.481	47.1	27.6	9.6	28.4	55.9	74.0	18.1	100	201
9	2738.792	47.9	28.2	10.0	28.4	57.7	74.0	16.3	100	209
10	3131.426	46.1	29.0	10.8	28.4	57.5	74.0	16.5	100	358
11	3580.151	47.7	29.1	11.9	28.3	60.4	74.0	13.6	100	358
12	3740.409	42.7	29.5	12.3	28.3	56.2	74.0	17.8	100	358
13	3916.694	45.9	29.9	12.7	28.3	60.2	74.0	13.8	100	188
14	5166.680	37.8	33.3	15.2	28.1	58.2	74.0	15.8	100	180
----- Vertical -----										
15	1176.282	47.9	24.1	6.4	28.5	49.9	74.0	24.1	100	1
16	1568.910	52.6	24.6	7.6	28.5	56.3	74.0	17.7	100	165
17	1777.243	49.0	24.6	8.0	28.5	53.1	74.0	20.9	100	1
18	1969.551	58.1	24.6	8.4	28.5	62.6	74.0	11.4	100	205
19	2370.197	53.8	26.7	9.3	28.5	61.3	74.0	12.7	100	210
20	2546.481	49.3	27.6	9.6	28.4	58.1	74.0	15.9	100	1
21	2770.844	49.5	28.3	10.1	28.4	59.5	74.0	14.5	100	210
22	2979.180	42.7	28.9	10.5	28.4	53.7	74.0	20.3	100	195
23	3524.060	47.1	28.9	11.8	28.3	59.5	74.0	14.5	100	200
24	3764.448	39.7	29.6	12.4	28.3	53.4	74.0	20.6	100	216
25	3932.720	41.2	30.0	12.8	28.3	55.7	74.0	18.3	100	1
26	5142.642	39.4	33.2	15.3	28.1	59.8	74.0	14.2	100	223

< USB MODE \_ (1 ~ 6) GHz \_ Average >

**RADIATED EMISSION**

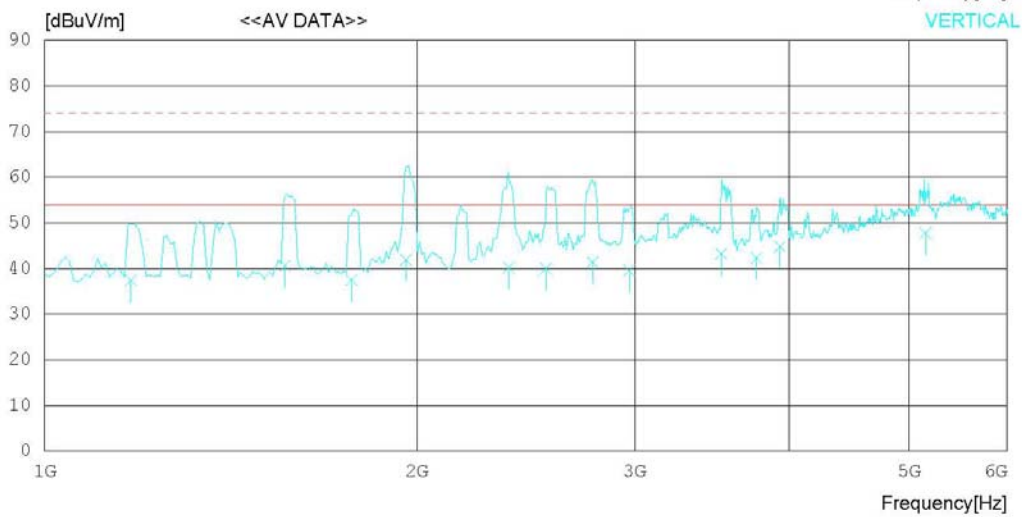
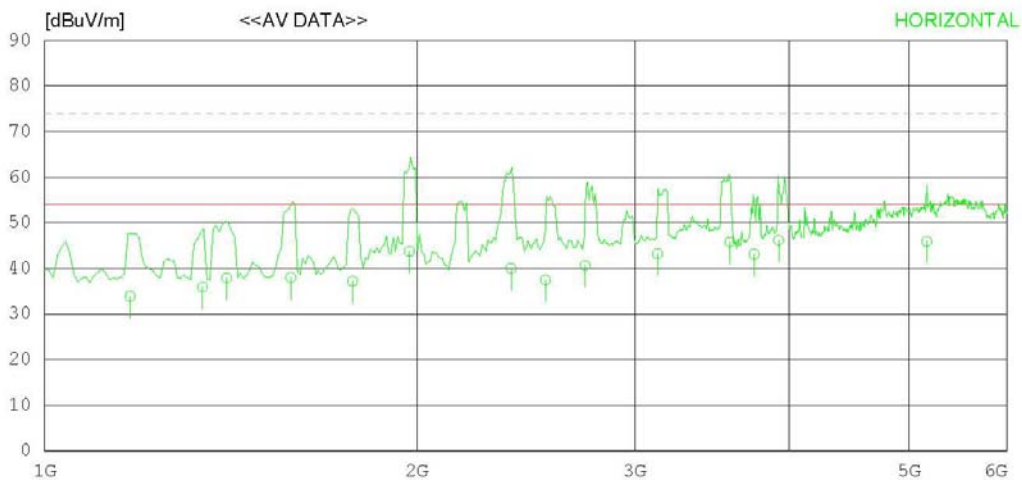
Date : 2013-02-14

Model Name : 42LN5750-UH  
Model No. :  
Serial No. :  
Test Condition : USB

Reference No. :  
Power Supply : 120 V 60 Hz  
Temp/Humi : 22 °C 39 % R.H.  
Operator :

Memo :

LIMIT : FCC Part15 Subpart.B Class B (3m) - 18G(Avg)  
FCC Part15 Subpart.B Class B (3m) - 18G(Peak)



## RADIATED EMISSION

Date : 2013-02-14

Model Name : 42LN5750-UH	Reference No. :
Model No. :	Power Supply : 120 V 60 Hz
Serial No. :	Temp/Humi : 22 °C 39 % R.H.
Test Condition : USB	Operator :

Memo :

LIMIT : FCC Part15 Subpart B Class B (3m) - 18G(Avg)  
 FCC Part15 Subpart B Class B (3m) - 18G(Peak)

No.	FREQ [MHz]	READING AV [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]
----- Horizontal -----										
1	1172.518	32.0	24.1	6.3	28.5	33.9	54.0	20.1	100	142
2	1341.654	33.1	24.4	6.9	28.5	35.9	54.0	18.1	100	139
3	1403.251	34.7	24.5	7.2	28.5	37.9	54.0	16.1	100	152
4	1581.450	34.2	24.6	7.7	28.5	38.0	54.0	16.0	100	150
5	1774.225	33.1	24.6	8.0	28.5	37.2	54.0	16.8	100	149
6	1971.625	39.2	24.6	8.4	28.5	43.7	54.0	10.3	100	151
7	2382.584	32.4	26.8	9.3	28.5	40.0	54.0	14.0	100	139
8	2540.215	28.7	27.6	9.6	28.4	37.5	54.0	16.5	100	144
9	2734.759	30.8	28.2	10.0	28.4	40.6	54.0	13.4	100	152
10	3130.006	31.8	29.0	10.8	28.4	43.2	54.0	10.8	100	161
11	3581.669	33.1	29.1	11.9	28.3	45.8	54.0	8.2	100	148
12	3744.825	29.6	29.5	12.3	28.3	43.1	54.0	10.9	100	139
13	3920.139	31.9	29.9	12.7	28.3	46.2	54.0	7.8	100	155
14	5164.158	25.5	33.3	15.2	28.1	45.9	54.0	8.1	100	158
----- Vertical -----										
15	1174.122	35.4	24.1	6.4	28.5	37.4	54.0	16.6	100	148
16	1564.629	36.9	24.6	7.6	28.5	40.6	54.0	13.4	100	152
17	1772.336	33.4	24.6	8.0	28.5	37.5	54.0	16.5	100	139
18	1961.658	37.4	24.6	8.4	28.5	41.9	54.0	12.1	100	142
19	2372.418	32.7	26.7	9.3	28.5	40.2	54.0	13.8	100	158
20	2544.174	31.2	27.6	9.6	28.4	40.0	54.0	14.0	100	160
21	2776.358	31.4	28.3	10.1	28.4	41.4	54.0	12.6	100	155
22	2970.258	28.6	28.9	10.5	28.4	39.6	54.0	14.4	100	149
23	3524.100	30.8	28.9	11.8	28.3	43.2	54.0	10.8	100	151
24	3762.859	28.7	29.5	12.4	28.3	42.3	54.0	11.7	100	148
25	3931.466	30.3	30.0	12.8	28.3	44.8	54.0	9.2	100	136
26	5157.522	27.4	33.3	15.2	28.1	47.8	54.0	6.2	100	159

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## Appendix 1

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### List of Test and Measurement Instruments

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment is identified by the Test Laboratory.

### 1. Conducted Disturbance

Name of Instrument	Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
<input type="checkbox"/> SPECTRUM ANALYZER	8591E	H/P	3649A05889	2012.03.05	2013.03.05
<input type="checkbox"/> RFI/FIELD INTENSITY METER	KNM-2402	KYORITSU	4N-170-3	2012.07.02	2013.07.02
<input type="checkbox"/> LISN	KNW-407	KYORITSU	8-317-8	2013.01.08	2014.01.08
<input type="checkbox"/> LISN	PMM L2-16B	NARDA S.T.S. / PMM	000WX20305	2012.07.25	2013.07.25
<input type="checkbox"/> 50 OHM TERMINATOR	CT-01	TME	N/A	2013.01.08	2014.01.08
<input checked="" type="checkbox"/> EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2012.03.06	2013.03.06
<input checked="" type="checkbox"/> LISN	ESH2-Z5	ROHDE & SCHWARZ	828739/006	2012.09.18	2013.09.18
<input checked="" type="checkbox"/> LISN	LISN1600	TTI	197204	2012.07.02	2013.07.02
<input checked="" type="checkbox"/> 50 OHM TERMINATOR	CT-01	TME	N/A	2013.01.08	2014.01.08

### 2. Radiated Disturbance

Name of Instrument	Model No.	Manufacturer	Serial No.	Cal. Date	Next Cal. Date
<input checked="" type="checkbox"/> EMI TEST RECEIVER	ESU	ROHDE & SCHWARZ	100014	2013.01.08	2014.01.08
<input checked="" type="checkbox"/> BILOG ANTENNA	CBL6112B	SCHAFFNER	2737	2012.11.06	2014.11.06
<input checked="" type="checkbox"/> HORN ANTENNA	BBHA9120A	SCHWARZBECK	322	2012.05.15	2014.05.15
<input checked="" type="checkbox"/> AMPLIFIER	8447E	H/P	2945A02865	2013.01.08	2014.01.08
<input checked="" type="checkbox"/> AMPLIFIER	MLA-100M18-B01-25	TSJ	1719458	2012.06.04	2013.06.04
<input type="checkbox"/> SPECTRUM ANALYZER	E4411B	AGILENT	US41062735	2012.07.11	2013.07.11
<input type="checkbox"/> AMPLIFIER	8447D	AGILENT	2443A03690	2012.07.01	2013.07.01
<input type="checkbox"/> EMI TEST RECEIVER	ESCI	ROHDE & SCHWARZ	100364	2012.03.06	2013.03.06
<input type="checkbox"/> BICONICAL ANT.	VHA 9103	SCHWARZBECK	91032789	2012.04.10	2014.04.10
<input type="checkbox"/> LOG-PERIODIC ANT.	UHALP 9108A	SCHWARZBECK	590	2012.04.10	2014.04.10
<input type="checkbox"/> BICONICAL ANT.	VHA 9103	SCHWARZBECK	91031946	2012.03.12	2014.03.12
<input type="checkbox"/> LOG-PERIODIC ANT.	UHALP 9108-A1	SCHWARZBECK	1098	2012.03.12	2014.03.12
<input type="checkbox"/> AMPLIFIER	MLA-100K01-B01-26	TSJ	1252741	2012.03.05	2013.03.05

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**Appendix 2**

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**Report Revision History**

Revision Date	Description	Revised By	Revision Reviewed By
None	Original	N/A	N/A